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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/625,792	07/26/2000	Hartmut Boche	02581-P0316A	8313

24126 7590 07/29/2003

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EXAMINER

MATHEW, FENN C

ART UNIT PAPER NUMBER

3764

DATE MAILED: 07/29/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/625,792

Applicant(s)

BOCHE, HARTMUT

Examiner

Fenn Mathew

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,5,8,9,11-14 and 16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,5,8,9,11-14 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 16 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically applicant has claimed that the recess opening is smaller than the recess whereas the specification fails to disclose or illustrate in the figures a recess opening that forms a restriction and is also smaller than the recess..

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1, 5, 8-9, 11-12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuno et al. (4,274,423) in view of Lele (4,960,109) and Hoek (6,312,380). Referring to claim 1, Mizuno discloses a medical instrument having an

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instrument body (10, 11), a recess in the instrument body (see notch in fig. 3) which comprises a collar forming an undercut (angled walls), the collar having an inside diameter (inherently), an embedding medium (see 21, 22 in fig. 3 and col. 5, lines 52-col. 6, line 4) a readable data carrier (14) embedded in the recess (see fig. 3), the data carrier being non-removeably held in the undercut. Mizuno does not disclose the data carrier having outer dimension smaller than the inside diameter. Lele teaches an analogous device including a recess wherein a data carrier is placed. Lele teaches the recess having a larger diameter than the outer dimensions of the data carrier (see fig. 2a) for easier placement into the instrument body. It would have been obvious to one having ordinary skill in the art at the time of invention to provide Mizuno with a data carrier with a outer dimensions smaller than the opening of the recess in an instrument body as taught by Lele for easier placement in the instrument body. Furthermore, Mizuno does not disclose the data carrier is a wireless data carrier. Hoek teaches in column 1, lines 26-44 that it is known in the medical instrument art that measures physiological characteristics, to make the device with a wireless data carrier in order to reduce costs and technical difficulties (size, structural integrity, sensor performance) that result from guide wires connected to sensors in small probes. Thus one having ordinary skill in the art would have known to make the data carrier of Mizuno a wireless data carrier in order to reduce the costs of the instrument and to overcome technical limitations of the wired data carrier.

3. Referring to claim 5, Mizuno discloses the instrument is made from stainless steel (col. 7, lines 1-2) and that the medium is made from silicone rubber (col. 6, lines 1-

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4). nes 1-2) and that the medium is made from silicone rubber (col. 6, lines 1-4).

Mark's Standard Handbook for Mechanical Engineers states that the elasticity modulus of stainless steel is 27.6 msi (Table 5.1.3) and Mechanics of Materials states the elasticity modulus of stainless steel is between 28-30 msi and for rubber is between 0.1 and 0.6 msi (Table H-2). As such, Mizuno inherently discloses the embedded medium (silicone rubber) has an elasticity modulus smaller than the elasticity modulus of the instrument body.

4. Referring to claim 8, Mark's Standard Handbook for Mechanical Engineers states that the heat conductivity for steel is 26.2 (Table 4.4.1) and for soft rubber is 0.08. Thus Mizuno inherently discloses the heat conductivity of the embedded medium is smaller than that of the instrument.

5. Referring to claim 9, Mizuno shows a spacer (13) arranged between the data carrier and the recess.

6. Referring to claim 11, Figure 3 of Mizuno shows a recess that comprises an opening (around 12) which forms a window on the outer surface of the body.

7. Referring to claim 12, since the material around the recess is different from the outer surface of the instrument as shown in figure 3 of Mizuno, the recess is visually recognizable in the region of the outer surface.

8. Referring to claim 14, Hoek teaches the desire to make the data carrier wireless. In addition, Hoek teaches in column 3, lines 55- column 4, line 20 that the data carrier includes a transmitter and receiver (i.e. transponder with an antenna). Thus for the

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reasons stated above, one having ordinary skill in the art would have known to include a transponder with an antenna.

9. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuno in view of Lele and Hoek, and further in view of Edwards (5,456,682). Mizuno also teaches in column 6, line 51 that the instrument is also made from a woven Dacron. Dacron is made from a polyethylene material. Ashby discloses polyethylene is classified as an engineering polymer region on page 35 and shows the elasticity modulus for HDPE and LDPE on page 37 to be below epoxy and ceramics. Mizuno also discloses the embedded medium is used to electrically isolate and to provide safety to the data carrier. However, Mizuno does not disclose an embedded medium other than silicone rubber. Edwards teaches in col. 7 lines 43-51 a potting compound to encapsulate and insulate a sensor of medical probe that includes a loctite material. Loctite is a ceramic material. Ashby discloses on pages 34 and 37 that the ceramic materials have higher elasticity modulus than engineering polymers. Thus, one having ordinary skill in the art would have known to substitute the silicone rubber encapsulated material for a loctite-potting compound in order to isolate the data carrier of Mizuno. Therefore, the embedded medium would have a larger elasticity modulus than the instrument body in order to properly isolate the sensor electrically.

10. Claim 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuno in view of Lele and further in view of Yunoki (4,686,964). Mizuno, as modified above discloses a wireless data carrier, however there is no discussion to surround the data carrier by a glass casing. Yunoki teaches in the abstract to surround sensors of a

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medical device with a casing in order to shield the sensor from external electromagnetic effects. Thus, one having ordinary skill in the art would have know to surround a sensor with a casing in order to shield the sensor from external electromagnetic effects.

Additionally, it would have been obvious to one having ordinary skill in the art at the time the invention was made to select glass casing, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use, and glass is a material used to shield against electromagnetic effects, and is suitable for the purposes taught by Yunoki.

Response to Arguments

11. Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection. Specifically, addition of Lele reference has overcome issues regarding data carrier size versus recess size.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fenn Mathew whose telephone number is (703) 305-2846. The examiner can normally be reached on Monday - Friday 9:00am - 5:30pm.

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9302 for regular communications and (703) 872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.



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July 25, 2003